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7148.001 Sequence Listing.ST25  
SEQUENCE LISTING

<110> Cummings, Richard D.

Kawar, Ziad S.

<120> Beta 1, 4-N-ACETYLGLACTOSAMINYLTRANSFERASES,  
NUCLEIC ACIDS AND METHODS OF USE THEREOF

<130> 7148.001

<150> 60/411,242

<151> 2002-09-13

<160> 4

<170> PatentIn version 3.1

<210> 1

<211> 383

<212> PRT

<213> Caenorhabditis elegans

<400> 1

Met Ala Phe Arg His Leu Ala Val Ala Arg Leu Lys Ser Leu Leu Val  
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Leu Cys Ala Val Leu Leu Val His Ala Met Ile Tyr Lys Ile Pro  
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Ser Leu Tyr Glu Asn Leu Thr Ile Gly Ser Ser Thr Leu Ile Ala Asp  
35 40 45

Val Asp Ala Met Glu Ala Val Leu Gly Asn Thr Ala Ser Thr Ser Asp  
50 55 60

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Asp Leu Leu Asp Thr Trp Asn Ser Thr Phe Ser Pro Ile Ser Glu Val  
65 70 75 80

Asn Gln Thr Ser Phe Met Glu Asp Ile Arg Pro Ile Leu Phe Pro Asp  
85 90 95

Asn Gln Thr Leu Gln Phe Cys Asn Gln Thr Pro Pro His Leu Val Gly  
100 105 110

Pro Ile Arg Val Phe Leu Asp Glu Pro Asp Phe Lys Thr Leu Glu Lys  
115 120 125

Ile Tyr Pro Asp Thr His Ala Gly Gly His Gly Met Pro Lys Asp Cys  
130 135 140

Val Ala Arg His Arg Val Ala Ile Ile Val Pro Tyr Arg Asp Arg Glu  
145 150 155 160

Ala His Leu Arg Ile Met Leu His Asn Leu His Ser Leu Leu Ala Lys  
165 170 175

Gln Gln Leu Asp Tyr Ala Ile Phe Ile Val Glu Gln Val Ala Asn Gln  
180 185 190

Thr Phe Asn Arg Gly Lys Leu Met Asn Val Gly Tyr Asp Val Ala Ser  
195 200 205

Arg Leu Tyr Pro Trp Gln Cys Phe Ile Phe His Asp Val Asp Leu Leu  
210 215 220

Pro Glu Asp Asp Arg Asn Leu Tyr Thr Cys Pro Ile Gln Pro Arg His  
225 230 235 240

Met Ser Val Ala Ile Asp Lys Phe Asn Tyr Lys Leu Pro Tyr Ser Ala  
245 250 255

Ile Phe Gly Gly Ile Ser Ala Leu Thr Lys Asp His Leu Lys Lys Ile  
260 265 270

Asn Gly Phe Ser Asn Asp Phe Trp Gly Trp Gly Gly Glu Asp Asp Asp  
275 280 285

Leu Ala Thr Arg Thr Ser Met Ala Gly Leu Lys Val Ser Arg Tyr Pro

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290

295

300

Thr Gln Ile Ala Arg Tyr Lys Met Ile Lys His Ser Thr Glu Ala Thr  
 305                   310                   315                   320

Asn Pro Val Asn Lys Cys Arg Tyr Lys Ile Met Gly Gln Thr Lys Arg  
 325                   330                   335

Arg Trp Thr Arg Asp Gly Leu Ser Asn Leu Lys Tyr Lys Leu Val Asn  
 340                   345                   350

Leu Glu Leu Lys Pro Leu Tyr Thr Arg Ala Val Val Asp Leu Leu Glu  
 355                   360                   365

Lys Asp Cys Arg Arg Glu Leu Arg Arg Asp Phe Pro Thr Cys Phe  
 370                   375                   380

&lt;210&gt; 2

&lt;211&gt; 1152

&lt;212&gt; DNA

&lt;213&gt; Caenorhabditis elegans

&lt;400&gt; 2

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| cttctattag ttcatgcaat gatttataag attccatcgc tttacgagaa ccttactatc  | 120 |
| ggctcctcga cccttattgc cgacgtcgc acaatggagg cagtgctcgg gaatacggct   | 180 |
| tccacttcgg atgatctact tgatacgtgg aattccacgt tttcaccat ttctgaagtt   | 240 |
| aatcagacta gtttatgga ggacattcgt ccaatcctgt tccccgacaa ccagactctt   | 300 |
| caattctgta atcagacacc tccccacctc gtccggaccca tccgtgtatt cctcgatgag | 360 |
| cccgacttca aaactctcga gaaaatctat ccggacacgc acgcccgtgg acatggaatg  | 420 |
| cctaaggatt gtgttgcaag gcatcgtgtt gctattattg tgccctatacg agatcgtgaa | 480 |
| gcacatttga gaataatgct ccacaatttgc cactcgttgc tcgccaaaca acaattggac | 540 |
| tatgcaattt tcattgtgga gcaagtggcg aatcagacgt ttaatcgccg gaaactaatg  | 600 |
| aacgttggat acgacgttagc atcacgcctc tacccatggc agtgcttcat ctttcatgat | 660 |
| gtcgatttac tgcccgaaaga tgaccgtaac ctgtacacgt gtccattca accacgtcat  | 720 |
| atgagtgttag cgatcgataa attcaattat aaacttccat attcggcgat cttcggcgga | 780 |

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|  |      |
|--|------|
| atcagtgcac taacaaaaga tcacctgaag aaaatcaatg gatttcgaa tgattttgg    | 840  |
| ggttggggcg gagaggacga cgatttggcg acgagaacat cgatggctgg actgaaagtt  | 900  |
| tcaagatatac cgacacaaat tgcacgatat aaaatgatta agcactcgac ggaagcgacg | 960  |
| aatccagttt ataaatgccg ctacaaaata atggccaaa cgaagcgccg atggacacgt   | 1020 |
| gacggcctaa gcaatctgaa gtataagctc gtaaatctgg aattgaagcc tctctacact  | 1080 |
| cgagccgtcg tcgatttgct cggaaaagac tgccgcccggg agctgcgaag ggactttcca | 1140 |
| acgtgtttt ag   | 1152 |

<210> 3

<211> 26

<212> DNA

<213> Artificial sequence

<220>

<223> Completely synthesized.

<400> 3

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| gccaccatgg ctttcgtca tttggc | 26 |
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<210> 4

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> Completely synthesized.

<400> 4

|                           |    |
|---------------------------|----|
| ctaaaaaacac gttggaaagt cc | 22 |
|---------------------------|----|